



ONTARIO
SOCIETY
OF PROFESSIONAL
ENGINEERS

January 13, 2016

Gender Wage Gap Strategy Steering Committee
400 University Avenue, 12th Floor
Toronto, Ontario
M7A 1T7

Dear Gender Wage Gap Strategy Steering Committee,

Re: OSPE Submission – Closing the Gender Wage Gap

As the voice of Ontario's engineers, the Ontario Society of Professional Engineers (OSPE) is pleased to submit our feedback for the development of a strategy that will help close the wage gap between men and women in Ontario.

OSPE relies on its members to put together responses and recommendations that will help government develop evidence-based policies that will effect positive change in Ontario. For the attached submission, OSPE's Women in Engineering Advocacy Committee (WEAC) provided their input from the perspective of professional engineers working in a variety of sectors.

According to the 2015 Global Gender Gap Index, Canada dropped from 19th spot in 2014 to 30th spot in 2015. The World Economic Forum notes that since 2006, the economic gap has closed by just 3% and, at this rate, it will take 118 years to close the gap for women around the world. Closing the gender wage gap in Ontario is a complex issue that will require action from a number of stakeholders. Not only is it the right thing to do as Minister Kevin Flynn has noted, but it also makes economic sense. As a 2005 Royal Bank report notes, if the gap were closed, it would generate \$168 billion in new economic activity.

We would be pleased to meet with you if you require further information for the development of Ontario's Gender Wage Gap Strategy. To set up a meeting, please contact Catrina Kronfli, Policy Analyst, at ckronfli@opse.on.ca or (416) 223 -9961, ext. 243.

Sincerely,

A handwritten signature in black ink that reads 'Karen Chan'.

Karen Chan, P. Eng.
President and Chair
Ontario Society of Professional Engineers

A handwritten signature in black ink that reads 'Sandro Perruzza'.

Sandro Perruzza
Chief Executive Officer
Ontario Society of Professional Engineers

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1. What encourages and what prevents women from pursuing employment in jobs that tend to be male-dominated (e.g. STEM – science, technology, engineering, math – or skilled trades)? And what encourages and what prevents men from pursuing employment in jobs that tend to be female-dominated (e.g., nursing, child care, social work)?

The fields that individuals choose to enter are influenced in part by the way a child is socialized by parents and other family members, and the stereotypes they learn from their peers or the media (e.g., that men can't be nurses and women can't be engineers). OSPE members felt that girls are discouraged from pursuing science, technology, engineering, and mathematics (STEM) because of a perceived lack of ability. Instead, STEM is something that is learned as individuals are not born knowing how to solve calculus problems, for instance. This knowledge is gained over time and with practice and experience.

What encourages or prevents women from pursuing what are traditionally viewed as male-dominated professions (or men from pursuing what are traditionally viewed as a female-dominated professions) starts at an early age. OSPE members noted that elementary school teachers need more awareness and knowledge of what STEM entails (e.g., engineers don't just build bridges), so it would be beneficial for them to have standard guidance on this. Moreover, these influences affect the choices students make in high school and university. Students who do not take certain math and science courses in high school (e.g., Advanced Functions, Calculus and Vectors, Physics, etc.) are unable to pursue engineering at the post-secondary level. As a consequence, this affects, and ultimately, determines employment outcomes.

After graduation, OSPE members commented that some workplaces are more welcoming of women than others. STEM industries have a difficult time attracting and retaining women, particularly as their careers progress. The barriers to career advancement include unequal evaluation criteria (e.g., men being promoted based on potential, while women are promoted based on performance), lack of opportunities for high profile assignments and projects, and getting "mommy tracked" after maternity leave, either as a conscious choice for work-life balance or as a subconscious reaction by employers.

2. What kinds of services and supports might help men and women to consider pursuing and succeeding in non-traditional careers? What can businesses, business organizations and sectors do to attract and retain both men and women in non-traditional careers?

OSPE members noted that getting more women and men to consider pursuing non-traditional careers would require a shift in cultural and gender norms. There is also a need for educators and parents to encourage interest in STEM when it is demonstrated, to be careful in their language and actions, and to question what is considered "normal" subjects for girls and boys to pursue.

OSPE members also believed that, to support women who have pursued a non-traditional career such as engineering, there is a need for businesses to implement fair hiring practices and remove implicit biases. For instance, first names can be removed on cover letters so that the gender of an applicant is not obvious. Additionally, it is important to be mindful of masculine and feminine word choices in job postings. How a job is described can attract or discourage potential employees from pursuing a non-traditional career or industry.¹

To retain women who have pursued non-traditional careers such as engineering, companies should support, make available, and normalize parental leave for both men and women. OSPE members noted that the engineering profession loses women at the mid-career stage, particularly when returning from a maternity leave. This gets compounded by additional maternity leaves. Many women engineers choose to leave their companies for better work-life balance, which can also impact wages.

OSPE members noted that it is easier to take parental leave in the public sector than in the private sector. OSPE members added that for males in manufacturing and managerial roles, paternity leave is almost discouraged for those who want to be promoted. OSPE's 2010 Survey of Working Conditions for

¹ Ontario Network of Women in Engineering (ONWiE). *Gendered Language & Stereotype Awareness for Hiring Committees*. N.p.: WWEST, 2014. PDF. <http://www.onwie.ca/resources-tools/gender-diversity-101/ONWiE%20-%20Gendered%20Language%20and%20Stereotype%20Awareness%20for%20Hiring%20Committees%20-%20for%20print.pdf>

Engineers found that few men engineers take parental leave.² Moreover, some companies in the private sector lack a transition or accommodation plan for short-term leaves. This is problematic not just for paternity leave, but when specialized employees need to take leave for illness, accidents, or to care for family members.

3. Do the current laws (pay equity, equal pay for equal work, human rights) protect women from gender-related workplace discrimination and harassment? If not, how can these laws be improved? Can the operation of these laws be improved from the perspective of employers?

OSPE members believed that legislation is useful for gross abuses, but many inequities are subtle. OSPE members also felt that in the workplace, leadership from the top is important to ensure that workplace culture is respectful and inclusive.

OSPE members also mentioned that when women are on maternity leave, they are not at the top of their employer's mind when new projects arise. As a result, women may be excluded (not deliberately) from certain opportunities – a situation that cannot be addressed by current laws.

4. How could government, business, unions and individuals support caregiving responsibilities?

The number of seniors aged 65 and over is projected to more than double – from almost 2.1 million in 2013 to over 4.5 million by 2041.³ Thus, both childcare *and* eldercare are important for government to address. OSPE members noted a need for employers to support flexible work arrangements to help men and women who have caregiving responsibilities. With technology allowing employees to connect remotely, a traditional 9 to 5 workday is phasing out.

To support caregiving responsibilities, there is a need for Ontario to create more childcare facilities and community care resources to allow professionals – both men and women – to remain in the workforce while caring for children or elderly parents.

According to the Equal Pay Coalition, two-thirds of part-time workers in Ontario are women – many of whom have to work part-time because of the lack of affordable childcare options.⁴ As this organization says, “Access to affordable childcare can help to even the playing field for these women.”

In addition to a lack of childcare spaces, government needs to address the high childcare costs facing parents. As was noted in a recent *Globe and Mail* article, childcare fees are increasing year after year, outpacing the rate of inflation, and vary between and within cities. For instance, it costs \$174 a month for full-time toddler care in Gatineau, Quebec, while parents in Ottawa pay about \$1,194. A 2015 study by the Canadian Centre for Policy Alternatives found that a couple in Toronto with 2 children under 5 years of age could expect to pay \$28,300 per year – nearly half of the family's median income after taxes.⁵ The article found that the cheapest childcare spaces were available in cities with province-wide caps – Quebec City, Winnipeg, and Charlottetown. The article concludes that childcare is “An essential service that pays qualified staff too little and charges the families who need it too much simply isn't sustainable...”

5. What types of workplace programs and policies could address the barriers that prevent women from being hired, being promoted and achieving leadership positions?

In a recent *Globe and Mail* article, Catalyst Canada explains that they followed 8,000 to 10,000 MBA

² Ontario Society of Professional Engineers: Women in Engineering Advisory Committee. *Results of the 2010 Survey of Working Conditions for Engineers*. Toronto: Prism Economics and Analysis. Print.

http://c.ybcdn.com/sites/www.ospe.on.ca/resource/resmgr/doc_advocacy/2010_results_of_2010_survey_.pdf

³ “Fall 2014: Based on the 2011 Census.” *Ontario Population Projections*. Queen's Printer for Ontario, 2010, 15 Dec. 2015. Web. <http://www.fin.gov.on.ca/en/economy/demographics/projections/>

⁴ “Gender Pay Gap FAQs.” Equal Pay Coalition, 2011. Web. <http://www.equalpaycoalition.org/about-pay-equity/>

⁵ Anderssen, Erin. “Parents, start saving now: Child care fees just keep going up.” *Globe and Mail* December 9, 2015. Web. <http://www.theglobeandmail.com/life/parenting/bearing-the-rising-cost-of-child-care-in-canada/article27674463/>

graduates around the world in similar jobs to see what happens to them after they complete their degree.⁶ This study found that pay is an issue right out of MBA school – the gap between women and men in similar roles in Canada is \$8,000, which is twice the global average. The article explains that part of the problem is the kind of work experience that men and women are offered. They found that (on average) men’s budgets were twice that of their female counterparts, with three times the number of direct reports and more exposure to senior executives. As the article notes, “That’s the kind of work experience that leads to advancement, so right out of the gate, those are critical differences in compensation and opportunity, and that’s the kind of stuff that really stalls someone’s career.” The article also mentions that informal networks that might be gender specific can create advantages or disadvantages. Additionally, women, more so than men, take time out for childrearing and, according to the Catalyst’s Executive Director, “[women] have to reclaim your space in a way that’s both diplomatic but fairly assertive” when they return to the workforce.

OSPE members believed that companies need to track the number of women hired, promoted, and entering leadership roles. As is mentioned in a recent *Globe and Mail* article, tracking results by gender could help companies understand where they stand, what needs to be done, and, in turn, measure progress.⁷ OSPE members also noted that mentoring and defined leadership or advancement training programs could help address these barriers.

6. What actions could employers take to ensure that women receive equal opportunities for training and advancement?

OSPE members felt that sponsorship and mentorship programs are ways that employers can ensure women receive training and development opportunities.⁸

7. Some jurisdictions require workplaces to report on their progress on addressing workplace gender imbalances and gender wage gaps. What would the effect be if Ontario required this?

Canada has already instituted a “comply or explain” policy⁹ with regards to the number of women on boards of governance for publicly traded companies. To address workplace gender imbalances and the gender wage gap, an OSPE member posed the following question: Would it be feasible to expand this policy to the workforce in general?

8. Are some groups of women and men (e.g., Aboriginals, immigrants, those in low-income families, women with disabilities), more affected than others? In what way? How could these negative impacts be prevented?

In 2015, OSPE released a report entitled *Crisis in Ontario's Engineering Labour Market: Underemployment Among Ontario's Engineering-Degree Holders*.¹⁰ Drawing on the 2011 National

⁶ Attfeld, Paul. “Canada still has a long way to go to close gender pay gap.” *Globe and Mail* November 24, 2015. Web. <http://www.theglobeandmail.com/report-on-business/international-business/canada-still-has-a-long-way-to-go-to-close-gender-pay-gap/article27444177/>

⁷ Seka, Leyla. “Four ways to close the gender wage gap.” *Globe and Mail* November 17, 2015. Web. <http://www.theglobeandmail.com/report-on-business/careers/leadership-lab/four-ways-to-close-the-gender-wage-gap/article27254895/>

⁸ For a definition on sponsorship versus mentorship, see the following article. “Sponsors vs. Mentors: What’s the difference?” *Women Powering Business*, 2015. Web. <http://www.womenpoweringbusiness.com/sponsors-vs-mentors-whats-the-difference/> and <http://www.ngenperformance.com/blog/leadership-2/mentoring-versus-sponsorship-why-you-need-a-sponsor>

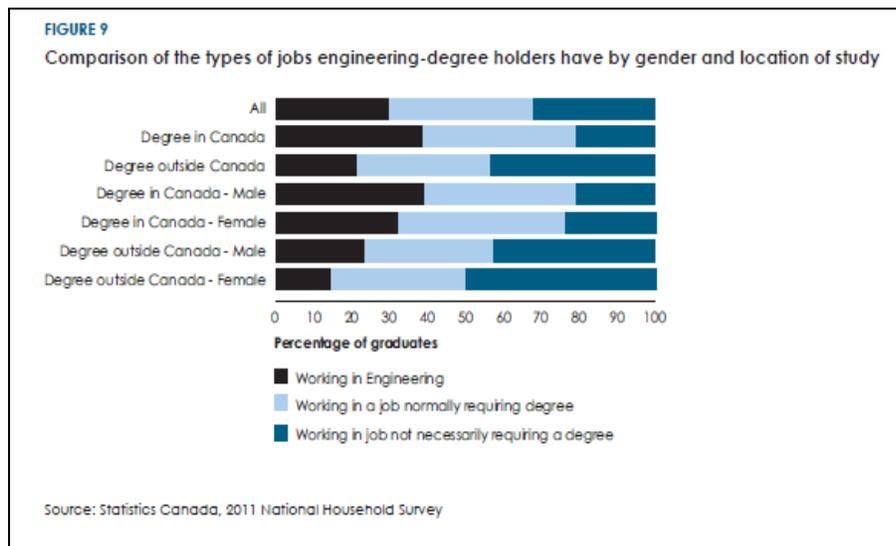
⁹ For more on the “comply or explain” policy, see the following article. “OSC ‘comply and explain’ plan for women on boards draws praise.” *CBC News* April 17, 2014. Web. <http://www.cbc.ca/news/business/osc-comply-and-explain-plan-for-women-on-boards-draws-praise-1.2613988>

¹⁰ Ontario Society of Professional Engineers. *Crisis in Ontario's Engineering Labour Market: Underemployment Among Ontario's Engineering-Degree Holders*. Rep. Toronto: Ontario Society of Professional Engineers, 2015. Web. [http://c.y.mcdn.com/sites/www.ospe.on.ca/resource/resmgr/DOC_advocacy/2015_REPORT_Underemployment .pdf](http://c.y.mcdn.com/sites/www.ospe.on.ca/resource/resmgr/DOC_advocacy/2015_REPORT_Underemployment.pdf)

Household Survey, the report found that over 33% of engineering-degree holders worked in jobs that did not necessarily require a university degree. Moreover, only about 30% of employed individuals in Ontario who held a bachelor's degree or higher in engineering worked as engineers or engineering managers – the lowest match rate of all the regulated professions the survey compared. OSPE considers underemployment to be a serious problem for engineering degree holders and it could have a significant impact on Ontario's engineers, industries, and economy if left unaddressed.

For internationally trained engineers (ITEs), the numbers were bleaker – only 21% of ITEs actually worked as engineers or engineering managers, while 44% of ITEs worked in jobs that did not require a university degree. The report also found that fully half of women ITEs may be considered underemployed – the highest level of underemployment that the study found.

Thus, although the best compensated fields are in technology and in the hard sciences, these fields remain male-dominated and women face barriers that prevent their full participation.



9. Societal attitudes can create barriers. Please give examples of how government, business, labour, advocacy groups, individual leaders or others could help change attitudes about women's roles, value and contributions in the workplace.

In August 2015, the hashtag #ILookLikeAnEngineer caught much media attention. San Francisco platform engineer Isis Wenger agreed to be featured in a recruiting campaign for her company. The image drew sexist comments from some who could not believe she was an engineer. Isis took to social media and asked women engineers to share an image of themselves and help re-define what engineers look like.¹¹ Another social campaign that helped change societal attitudes was the GoldieBlox toy video.¹²

These kinds of campaigns help challenge societal attitudes by educating the public about what women in non-traditional professions look like and do, thus helping younger generations envision themselves as future engineers.

OSPE members also noted that toy aisles in retail stores are segregated into sections for boys and girls, which can create barriers. OSPE members added that less stereotypes in advertising and commercials for toys, cleaning products, and advertising in general could help address these barriers.

¹¹ "What does an engineer look like?" BBC Trending, 2015. Web. <http://www.bbc.com/news/blogs-trending-33783007>

¹² *About GoldieBlox*. GoldieBlox. Web. <http://www.goldieblox.com/pages/about>

10. The gender wage gap will not be closed by a single solution. It will require a variety of approaches. What ideas or best practices can you share (e.g., educational or awareness campaigns, economic incentives or penalties, income supports, social programs, partnership development, etc.)?

OSPE members believed that forging connections between recent graduates and seasoned professionals is beneficial. As was recommended in a *Globe and Mail* article, speaking up is important: “If you don’t ask questions, you’ll never know the answers. And if you don’t feel you’re equipped to advocate for yourself for [a] salary or promotion, find a sponsor or mentor within your company to help build your confidence and strategize for you to have that conversation [with your employer].”

The article adds that “Beyond internal resources, arm yourself with research, read up on wage inequality and tips on how to negotiate a raise.” An invaluable resource for women engineers in Ontario is the *Mercer OSPE National Engineering Compensation Survey*. The 2015 report represents data submitted by 180 organizations employing 12,600 staff. It provides information about how much engineers at different levels and in different sectors are compensated – information which can be used by women in salary negotiations. This resource is available at no-cost to OSPE members and for a nominal fee for non-OSPE members.

OSPE recognizes that engineering remains a non-traditional career for women in Canada. To encourage women to enter and remain in the engineering profession, in 2015 Engineers Canada set a goal of raising the percentage of newly licensed engineers that are women to 30% by 2030.¹³ Currently, less than 10% of practicing licensed engineers are women.

This goal is one of the guiding principles behind the launch of OSPE’s Engineering Professional Success Pilot Mentorship Program, funded by Status of Women Canada. The mentorship program matches recent female engineering graduates with Canadian-trained and internationally trained female or male engineers who have experience in the engineering field. Mentors share their experiences with their protégée, provide advice, and coaching as protégées work towards their professional goals such as licensure. OSPE conducted a soft-launch of the program in November 2015 and has matched 12 protégées with a mentor.

11. Are there other issues or barriers, not included above, that contribute to the gender wage gap, or that prevent women from full participation in workplaces?

Another issue not addressed above is minimum wage in Ontario. The Pay Equity Coalition noted in its 2014 submission to the Ministry of Labour that the majority of minimum wage employees are women.¹⁴ The Equal Pay Coalition notes that the job classes dominated by women tend to be paid less than those dominated by men.¹⁵ The Government of Ontario’s decision to increase the minimum wage from \$11 to \$11.25 per hour in October 2015 should therefore improve the standard of living for men and women.

According to the Equal Pay Coalition, “Any increase to statutory minimum wage laws serves as a down payment on closing the gender pay gap for vulnerable workers”¹⁶ and this organization advocates for an increase in minimum wage to \$15 per hour.

¹³ “30 by 30.” Engineers Canada. Web. <https://www.engineerscanada.ca/30-by-30>

¹⁴ Pay Equity Commission. “Submission to Ministry of Labour in Response to Consultation on Ontario’s Minimum Wage: Minimum Wage, Low-Wage Women Workers and Gender Wage Gaps.” Queen’s Printer for Ontario, 14 Feb. 2014. Web. http://www.payequity.gov.on.ca/en/about/pubs/submissions/minwage_submission.php

¹⁵ “Gender Pay Gap FAQs.” Equal Pay Coalition, 2011. Web. <http://www.equalpaycoalition.org/about-pay-equity/>

¹⁶ Pay Equity Commission. “Submission to Ministry of Labour in Response to Consultation on Ontario’s Minimum Wage: Minimum Wage, Low-Wage Women Workers and Gender Wage Gaps.” Queen’s Printer for Ontario, 14 Feb. 2014. Web. <http://www.equalpaycoalition.org/wp-content/uploads/2015/10/EPC-Make-Your-Story-Heard-Background-Campaign-Documents.pdf>

About the Ontario Society of Professional Engineers

The Ontario Society of Professional Engineers (OSPE) is the voice of engineers in Ontario. We represent the entire engineering community, including licensed and unlicensed engineering graduates and students who work or will work in several of the most strategic sectors of Ontario's economy. OSPE elevates the profile of the profession by advocating with governments, offering valued member services and providing opportunities for ongoing learning, networking and community building. OSPE was formed in 2000 after members of Professional Engineers Ontario (PEO) voted to separate regulatory and advocacy functions into two distinct organizations.

About the Women in Engineering Advocacy Committee

The core objective of the Women in Engineering Advocacy Committee (WEAC) is to work toward the creation of a more progressive and diverse engineering profession by encouraging the full participation of women in the profession. WEAC encourages more Ontario women to study engineering at the post-secondary level; to consider engineering as a career and to pursue licensure as professional engineers; and to take on leadership roles in the workplace and within the governance structure of the engineering profession. WEAC advances its advocacy agenda by engaging the engineering profession, government, educators, affinity organizations and other stakeholders.

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OSPE would like to thank its members who provided input and comments for this submission.